

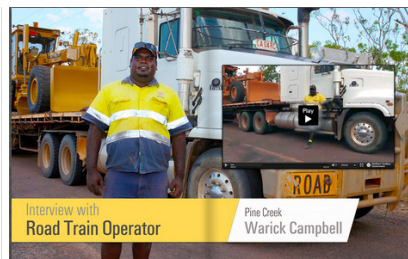


# Magazine 4A – Transport and Logistics

This document provides a transcript for the audio in Magazine 4A – Transport and Logistics. It includes a text copy for interviews, presenter videos and activity audio.

Slide Image	Transcript
	<p>JOBS BUILDING THE COMMUNITY Issue 1</p> <p>TRANSPORT &amp; LOGISTICS Safe Driving and Communication</p> <p>+ Learn about Working to Capacity</p> <p>Meet Workers Warick &amp; Jeffrey</p>
	<p>Transport &amp; Logistics, Introduction Welcome to Issue 1 of Building Community</p> <p>Presenter, Introduction to Environmental Health Officer 0:42 minutes</p> <p><i>Welcome to preVET. In this session, you'll meet Warick, Jeffrey, and Clayton. They work in transport and logistics, this means they move things using a schedule. Warick drives a big Mac truck, and transports things for his mates in the civil works industry. Jeffrey is the store supervisor, and picks up things from the barge every week. Clayton operates a big dump truck in a mine, he moves loads of minerals from one place to another. Let's meet them.</i></p>



Warick Jerome Campbell, Road Train Operator, Pine Creek  
2:56 minutes

*Hi, my name is Warick Campbell and I work for the Vic Daly Shire Council. I been with the shire about 3 years now, since the shire took over from the old council.*

*My job in this, what we're working at, is to drive trucks, unload grader, take grader out to the next work site, even doing side-tipping, water cart and depends what the boss tell me so, yep.*

*You have to be confident, you have to have licence, and to do this kind of job you have to prove yourself*

*I feel happy where I'm working now, driving trucks and unloading stuff like that. They're pretty happy about it.*

*Pre-start in the morning, check oil and water, tyre pressure, hydraulic oils levels and if things need to be filled – fill it up. They're just basic things.*

*It's important because you don't want to be down the road broken down when you have to get into the place at that time. Sometimes you have to rush, bit of a rush hour.*

*What I enjoy about my job is – one thing that I did is I get to go see other places, different places, travel, different scenery. I like what I'm doing, I got great support from my wife, and I think it's good the way I'm going.*

*Message out there – just follow your dream, do what you want to do – yeah, just follow your dream, I suppose.*

*[footage of Warick getting in truck, starting it up and reversing]*



Jeffrey Danydjati, Store Supervisor, Ramininging  
3:18 minutes

*My name is Jeffrey Danydjati. I'm from Ramininging.*

*I work at Ramininging shop as supervise, and I supervise clean in the shop,*

*how to get stuff from the back shop, to inside the shop, to fill the drinks up and fill the bread up, to make the shop good, look good, yo.*

*Every Tuesday I get up five o'clock, A.M., to go to the barge. You have to be in time to be at the barge to gets the stuff at the barge. It's thirty k's from here to Dubla. You be at the Dubla on time.*

*When I got my licence I was a – I learn to get my licence, I used to be working in the road gang to make a new bitumen at Elcho a long time ago, like twenty or thirty years, I don't know.*

*Then I got my – I learn there for my truck, to get a truck licence, then I got one and now I'm a truck driver now*

*Yo, all the time, if you come to work, we got a time clock here*

*If you come late, you won't get pay for the time that you come late, yo.*

*I really enjoy my work to be supervise, and supervisor, and my boys in the shop, yo. And I enjoy showing all the boys to be a role model in working, too, with my boys, and I enjoy all the time,*

*When working, or you growing healthy, strong, eat good food, and have good food, like cooking good, and be strong for your work.*

*If you want to work in the big company, like in the shop, it's for you kids, you have to stay in the school to be a read and write and stay and then when you need the job, then you will be – find a job easier, be easier, when you have good school, and education or a reading, when you grow up the job will be easier, because when you got the education with you.*



Clayton Anderson, Plant Operator, McArthur Mine, Gulf Region  
2:27 minutes

*I'm Clayton Anderson. I work at Macarthur River Mines. I am a plant operator.*

*I operate a truck, a bulldozer, a loader and an excavator.*

*I do a lot of ground work as well, probably just securing places like haul roads on light vehicles.*

*The three main things I do before proceeding is: a pre-start check – it's an all-round check around the truck; my log book, which I sign in; and the road rules.*

*[showing the prestart book]*

*A pre-start check. That involves checking oils, the tyres, the damages around the truck, just make sure it's safe for usage on a haul road, observing road rules, signs - give way, slow down, stopping, and keeping a safe distance behind another haul truck.*

*I love big trucks – big is better!*

*The thing mostly I love about my job is just the experience. Probably machinery, just being around big machinery and the opportunity to*

*operate one, and just – the bigger is better. I've been around big machinery, so like probably the biggest is a grader, yeah, so once I jumped in a grader I thought, "I want to at least be behind the wheel of a big machine," so yeah, had an opportunity as being a local to come out here, and yeah, once I just heard they were offering truck drivers I thought, yeah, that'd be me.*



## Activities Transport & Logistics

### Introduction

0:17 minutes

*Now think about how Warick drives his truck safely and communicates with his colleagues.*

*You'll help Jeffrey check that the delivery for the store is ready, and also learn how to use a forklift.*

*You'll also, learn about how Clayton and his team work together.*



## Safe Driving & Communication

You'll see Warick talking about driving his Mac truck safely and using non-verbal communication to direct his colleague's driving of a grader.

### Checking Delivery Reports

In this story you'll see Jeffrey operating his forklift and picking up the ALPA deliver from the barge.

### Working To Capacity

In this story, you'll meet Clayton, who drives a haul truck at Macarthur River Zinc Mine.



## Review

00:33 minutes

*Nice work!*

*You've now learned how the dimensions of a truck and how its load can affect how the driver works.*

*You've also learnt how he communicates with his team, to deliver the loads safely, properly and on time.*

*You've checked delivery orders and used counting strategies to check that it's complete.*

*You've also learned that finding out a machine's working capacity can make work efficient.*

*Nice work!*

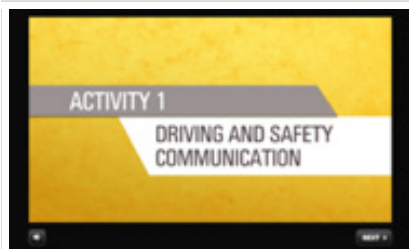




Northern Territory Government logo

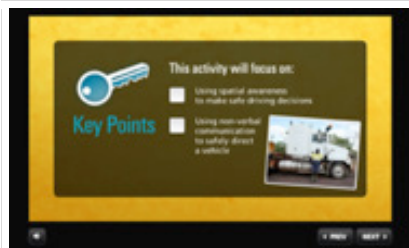
## Slide Image

## Activity A1 Driving and Safety Communication



Activity 1  
Driving and Safety Communication

*In this story, you'll see Warick driving his Mac truck safely and using non-verbal communication to direct his colleague's driving of a grader.*



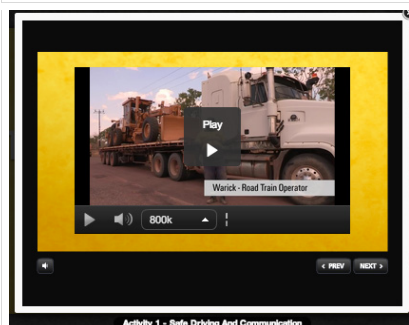
### Key Points

This activity will focus on:

- Using spatial awareness to make safe driving decisions
- Using non-verbal communication to safely direct a vehicle

*Warick uses his knowledge about his vehicle's dimensions to drive it safely and uses non-verbal communication to direct his colleague's driving of a grader.*

*Now in the video, Warick is going to describe to you what he does when he is driving.*



Warick Campbell, Road Train Operator  
3:00 minutes

*Hi, my name is Warick Campbell, driving a big Mack truck ready to unload the grader at the loading ramp.*

*We make sure we have our chains secure, locked down tight so the grader doesn't move. We have two – four, two on each side of the trailer.*

*[in truck driving]*

*This is an eighteen-speed Mack truck, Eaton Fuller gearbox, so here we go. We're going to unload the grader to the loading ramp, and let's have some fun.*

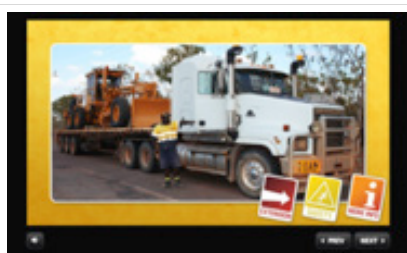
*The main thing is to keep an eye on both side mirrors, make sure everything's equal, and to other road users.*

*Make sure you check when you're turning, check in the mirror, look on both sides. You have to adjust the mirrors. Very important thing to adjust the mirrors where you can see whatever equipment you got on the back, where you want it. Adjust your seat where you want it, be comfortable. If you're comfortable with that, you're good to go.*

*Depends, when you carry grader or loader or something on the deck, be careful with the power lines, they can get pretty low, you don't want to hit any lines otherwise you'll have no power or something might happen to your truck, so make sure you check that in the mirror of the truck.*

*Normally when you have a large vehicle, a long trailer, to get into a gate you do a long – you turn it wide so you can get in and – yeah, just double-check the mirrors, if any cars coming.*

*Now just getting ready to unload the grader, we are in front of the ramp, and good to have a person, second hand person to see what you're doing because you can't really see what's behind you, give you a direction to where you want to go to, how far, where to turn the wheels and stuff like that.*



*Later, you'll see Warick unloading the grader. But now let's talk about the safe driving practices he uses when driving his truck.*



Why is load restraint important?

Use the NT's Motor Vehicle Registry (MVR) Information Bulletin PDF on Load Restraint to answer the question.

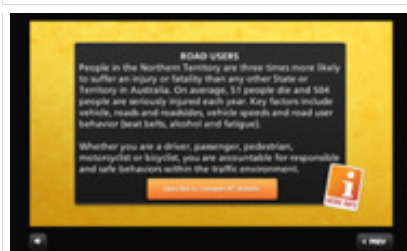
[View PDF – Load Restraint.pdf](#)



## Safety Tip

### Workplace Road Safety

Did you know that road crashes are the most common cause of work-related fatalities, injuries and absences from work? In the Northern Territory, 32 per cent of work related deaths were traffic incidents.



## More Info

### Road Users

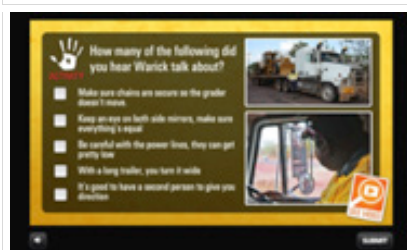
NT People are three times more likely to be injured or killed than other Australians. Each year, about:

- 51 people die
- 504 are hurt.

### Key causes:

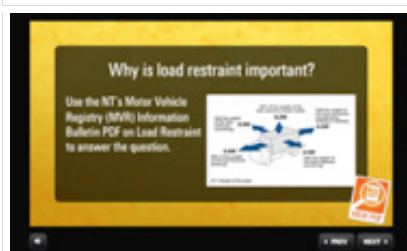
- Car Safety
- Roads
- Speed
- Behaviour (e.g. seatbelts, drinking, tiredness)

Everyone is responsible for safety on the roads.



## Activity

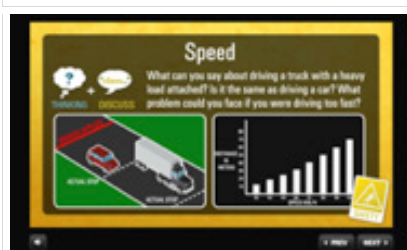
What five key points did Warwick talk about? Use the key words to help you remember.



## Class Discuss

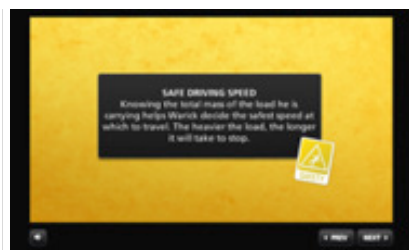
### Why is load restraint important?

Use the NT's Motor Vehicle Registry (MVR) Information Bulletin PDF on Load Restraint to answer the question.



## Speed

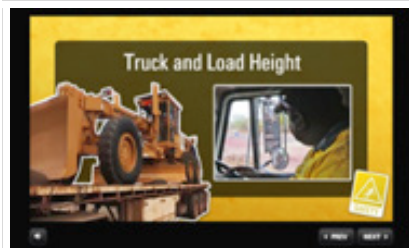
What can you say about driving a truck with a heavy load attached? Is it the same as driving a car? What problem could you face if you were driving too fast?



## Safety

### Safe Driving Speed

Knowing how heavy his load is helps Warick decide how fast to drive safely. The heavier the load, the longer it will take to stop.



## Truck and Load Height

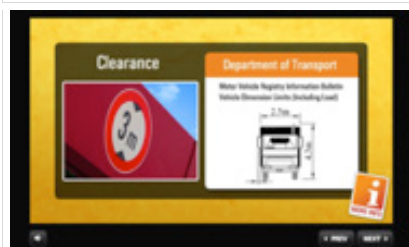
*To avoid hitting power lines, Warick knows total height of the truck and its load. You saw him looking back in his mirrors when he was passing under the wires.*



## Safety

### Driver Responsibility

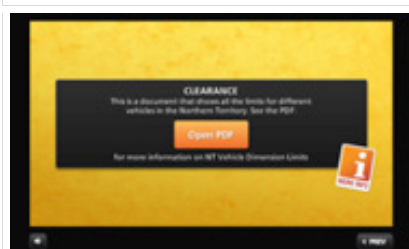
Warick uses his mirrors to drive safely. He moved his mirrors and seat to make sure he could see his load clearly. The cab of Warick's truck is his workplace, he must make sure he and other road users stay safe. The Chain of Responsibility Legislation means all people involved in transport are responsible for road safety.



## More Info

### Clearance

*Some roads and maps have signs which show how high a vehicle can be to pass under obstructions like overpasses, bridges, trees or wires. This sign tells you that there is three metres' clearance between the ground and the bridge it is on.*



## More Info

### Clearance

This is a document that shows all the limits for different vehicles in the Northern Territory. See the PDF: for more information on NT Vehicle Dimension Limits.





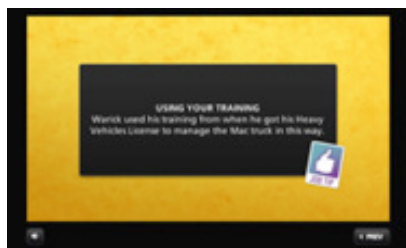
Thinking + Discuss

Clearance

If the height of Warwick's load is 3.2m, and the height of his truck deck is 1m, does this comply with the Department of Transport's Maximum vehicle height? Check the document to find out.



*Here is a view of Warwick's truck from above as it turns. When he was turning right, he had to keep a close eye on the right hand mirror to watch the trailer behind him. It has a different path than his cab does. The diagram shows you this.*

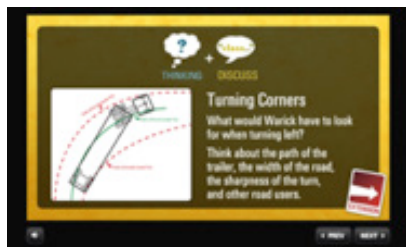


Job Tip

*Using Your Training*

*Warick uses his training from when he got his licence to manage the truck this way.*

*He has his Heavy Vehicle Combination (HC) Driver Licence.*



Thinking + Discuss

Turning Corners

What would Warwick have to look for when turning left?

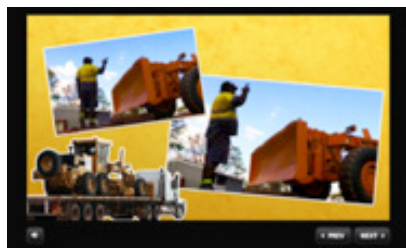
Think about the path of the trailer, the width of the road, the sharpness of the turn, and other road users.



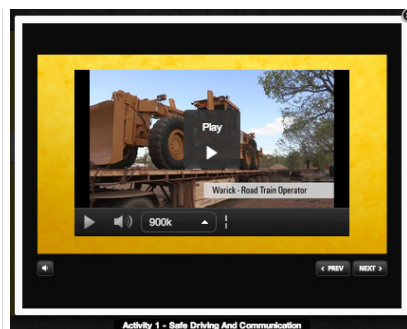
Extension

If Warwick's trailer was longer, how would this affect how he turned corners?

What would Warwick have to know to drive a longer truck safely around a corner?



*Now let's have a look at how Warwick directs his friend reversing the Grader off the bed of the truck. Warwick uses hand signals to tell his friend which way to go, and this helps them get the grader off the truck safely. The driver is giving commentary from inside the cab.*



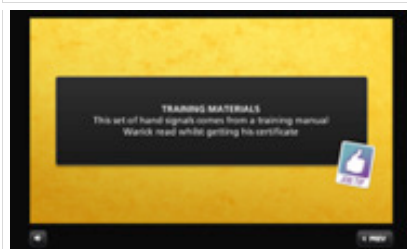
Warick – Road Train Operator  
1:24 minutes

*The main thing we do when we're unloading the grader is that we keep a good eye on the bloke directing us which way to go, left or right, and that's Warick today at the front of the truck and keeping an eye on Warick. I've got it in reverse, now he's directing me which way to go. Should be just straight back. Keeping a good eye on Warick, keep watching Warick, he's giving me hand signals which way to go, left or right, straight. There goes the back wheels, the back wheels are off, just keeping an eye on Warick, still. He's telling me which way to go, he's giving me the thumbs up, saying whether we're right or not, go left, so far so good. Coming up to the front wheels coming off the back of the truck, and there we'll lift the front blade again so we can clear the ramp.*

*I've just got to park this out of the way because other trucks do come in here and use our loading bay, so I have to make sure it's out of the way so other trucks can unload their loads*



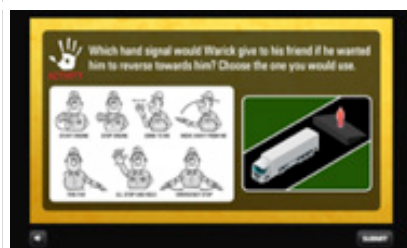
*Here is a set of hand signals used when doing what Warick just did. It's called spotting, and it helps communicate clearly and safely which direction the driver needs to go. You also saw Warick using his right hand to gesture away from him. If he had wanted his friend to go right, he would have held that hand out from his body.*



#### Job Tip

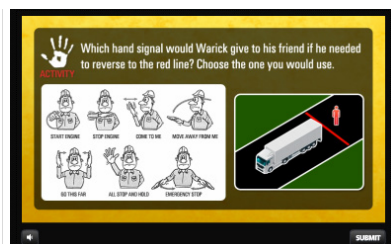
##### Training Materials

This set of hand signals comes from a training manual Warick read whilst getting his licence.



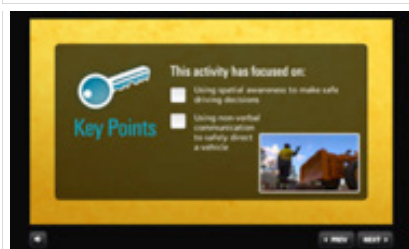
#### Activity

Which hand signal would Warick give to his friend if he wanted him to reverse towards him? Choose the one you would use.



## Activity

Which hand signal would Warick give to his friend if he needed to reverse to the red line? Choose the one you would use.

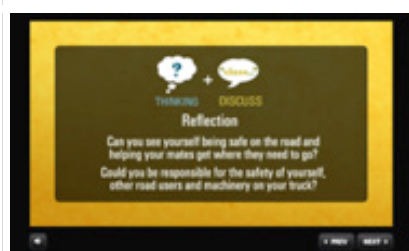


## Key Points

This activity has focussed on:

- Using spatial awareness to make safe driving decisions
- Using non-verbal communication to safely direct a vehicle

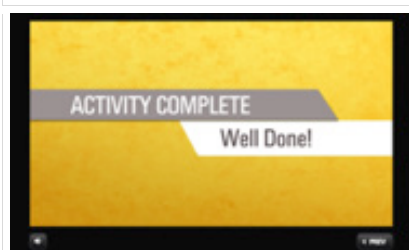
*Well done! You've had some experience thinking about how to drive safely, using knowledge of load heights, turning radius, hand signaling and speed.*



## Thinking + Discuss

*Can you see yourself helping your mates get where they need to go? Could you make sure yourself, other road users and machinery on your truck are all safe?*

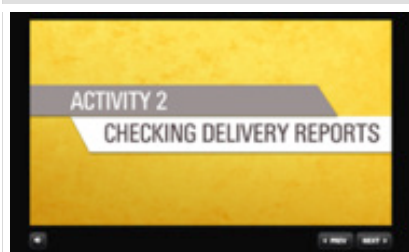
*Making sure transport is safe is the first and most important responsibility of people in this and every other industry, especially where large equipment is concerned.*



Activity Complete  
Well Done

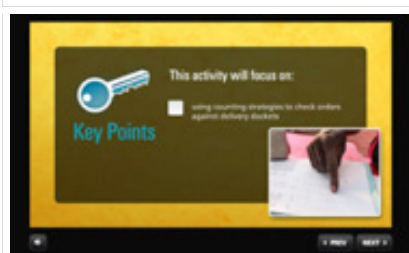
## Slide Image

## Activity A2 Checking Delivery Reports



### Activity 2 Checking Delivery Reports

*In this story you'll see Jeffrey operating his forklift and picking up the ALPA delivery from the barge.*



### Key Points

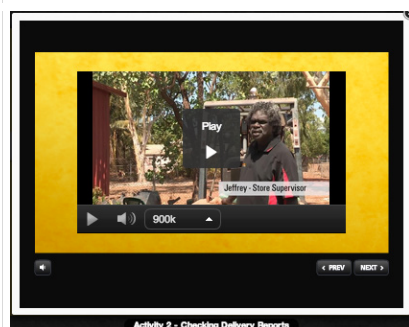
This activity will focus on:

- Using counting strategies to check orders against delivery dockets

*Jeffrey ensures that he has enough pallets on the truck to return to the barge, as well as check the order when he collects it to make sure it is complete.*

Jeffrey – Store Supervisor

2:59 minutes



*This forklift is one twenty – he lift one ton, and now I'm doing the back loading today to make safe to go to the barge at six o'clock. So I'm to take all the pallet and put it on the truck.*

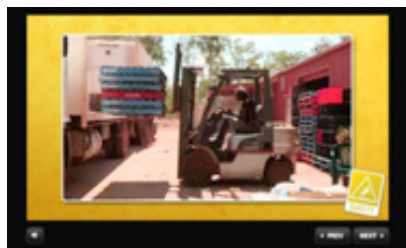
*[operating forklift]*

*I'm lifting six pallets, with the forklift to put it on the truck. If nobody walking in front of you, or at the back, more safer when you're working by yourself, there's nobody walks in front of you, its more better to work myself here. One, two, three, four, five, six. Six. Every eight pallet, we have to pick and put him on the truck, eight pallet. Yo. Look back, there's nobody on the back, so you be safe. So I have to put another 2 more. Every pallet you have to put on the truck. Every eight. Every eight.*

*[Places pallets on truck.]*

*Yo. Look – there's nobody the back. Try look around – safe. Try put 8 pellet up – you see that one? There's eight already there on the truck, so you have go turn around, you pick another eight more, and it's more lighter today, because – look at the front – there's nobody - you count one, two, three, four – one – counting from the top more easier – one, two, three, four, five, six, seven, eight. Eight pallet.*





*You saw Jeffrey operating his forklift at the shop safely. He made sure that the area was clear of other people.*



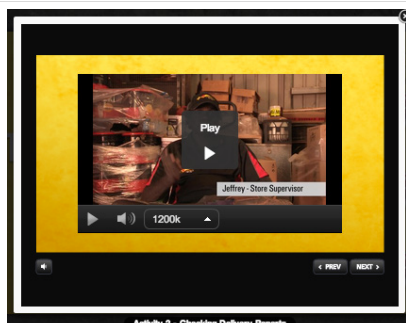
#### Safety

##### Safe forklift Operations:

If Jeffrey loaded heavy pallets on the ends of the fork lift, it might tip over, hurting Jeffrey and anyone who is around him.



*Jeffrey makes sure he is on time to meet the barge. He loads empty pallets at the barge and is receiving an order of pallets for the ALPA store. Listen to him describe how he checks everything is there.*



#### Jeffrey – Store Supervisor

3:01 minutes

*Sometime you have to fill the dry goods up on the truck, and you have to count all your pallet. How many pallet will go on the truck. We take the empty ones back to the barge, and we take the dry goods back to the shop*

*Jeffrey: [Pointing at paperwork.]*

*Dry goods. Seven. This mean goods, like this one, dry ones. Dry goods. Seven. This mean fourteen, fifteen, sixteen, seventeen, eighteen, nineteen, twenty, twenty-one. Fourteen – fourteen – fifteen, sixteen, seventeen, eighteen, nineteen, twenty, twenty-one – yeah, twenty-one pallets to go on the truck, the full one. Dry goods, D, yeah. Dry goods, twenty-one pallets dry goods to go on the truck.*

*Chiller here, look. [Points.] How many kilo? Today, four, five, six – six chiller to go in the on the cool there, and the freezer, seven, eight, nine, ten, eleven, twelve. And two fuel. Two fuel – two fuel tanks, like maybe that one over there.*

*[Pointing out details of paperwork.]*

[Footage of truck being loaded.]

*This paper tells me I will get twenty-one pallets to take back to the shop. This paper is telling me. Now I'm start counting the pallet. One, two, three, six, seven, eight, nine, ten, eleven..... sixteen – sixteen – sixteen – twenty. Seventeen, eighteen – sixteen pallets here, another five more to take it – they will take the pallet from the barge to the truck, another five more, but I got sixteen here.*

[Footage of truck being loaded.]

*I counting the chiller, chiller and the freezer, so there's six chiller. Six chiller and four chiller, so I will leave four spaces on the truck for bread, so it'll give way for fridge, the chiller and the freezer on the truck, on the freezer truck. Four spaces on the back, One, two, three, four, five, six, seven, and you put one more and then I will stop.*

*Leave this hole here, leave this space for that freezer, I put bread here*

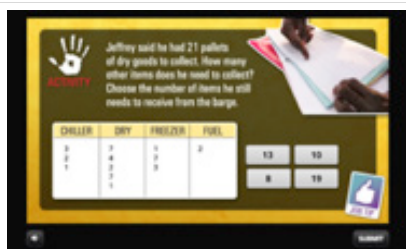


*This is a list Jeffrey has made for himself after reading the order he placed. You can see the list of the order above the table he wrote for himself. This is a good way for Jeffrey to manage all the pallets he has to check for.*



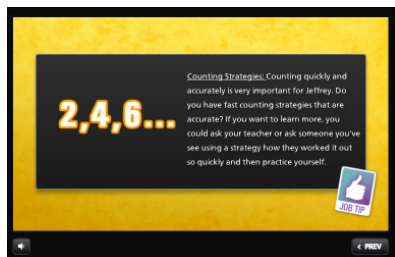
#### Job Tip

Jeffrey separated all the orders from the list on the paper into the columns in a table, to make checking the order easier for himself. This helps him add up all the items in front of them, and it keeps the information easier to manage than a list.



#### Activity

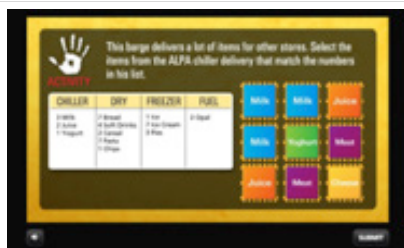
Jeffrey said he had 21 pallets of dry goods to collect. How many other items does he need to collect? Choose the number of items he still needs to receive from the barge.



### Job Tip

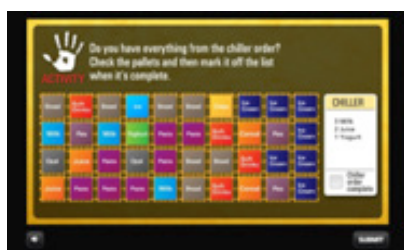
#### Counting Strategies:

Counting quickly and accurately is very important for Jeffrey. Do you have fast counting strategies that are accurate? If you want to learn more, you could ask your teacher or ask someone you've see using a strategy how they worked it out so quickly and than practice yourself.



### Activity

This barge delivers a lot of items for other stores. Select the items from the ALPA chiller delivery that match the numbers in his list.



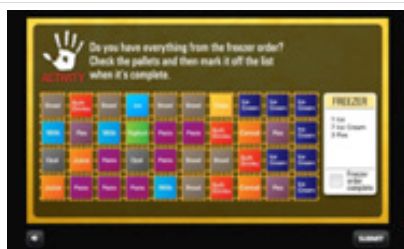
### Activity

Do you have everything from the chiller order? Check the pallets and then mark it off the list when it's complete.



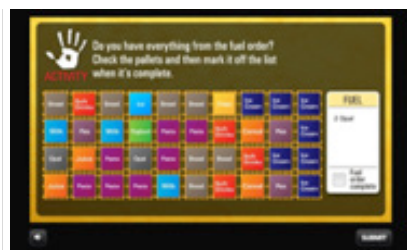
### Activity

Do you have everything from the dry order? Check the pallets and then mark it off the list when it's complete.



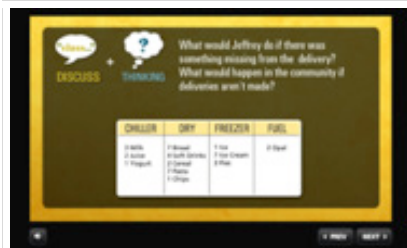
### Activity

Do you have everything from the freezer order? Check the pallets and then mark it off the list when it's complete.



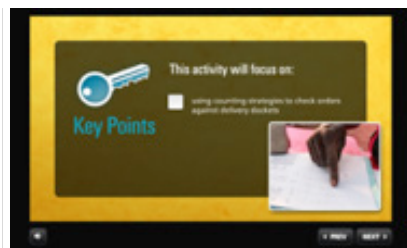
### Activity

Do you have everything from the fuel order? Check the pallets and then mark it off the list when it's complete.



### Thinking + Discuss

What would Jeffrey do if there was something from the delivery? What would happen in the community if deliveries aren't made?

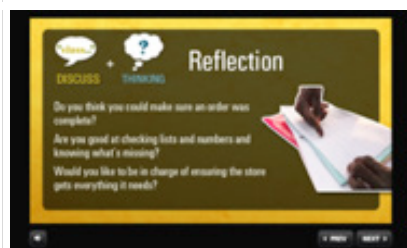


### Key Points

This activity has focussed on:

- Using counting strategies to check orders against delivery dockets

*Jeffrey ensures that he has enough pallets on the truck to return to the barge. As well as check the order when he collects it to make sure it is complete.*

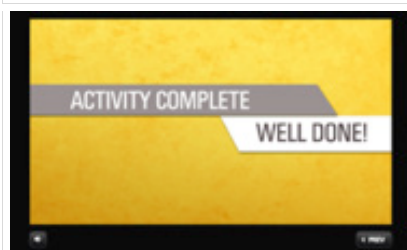


### Thinking + Discuss

*Could you make sure an order was complete?*

*Are you good at checking lists and numbers and knowing what's missing?*

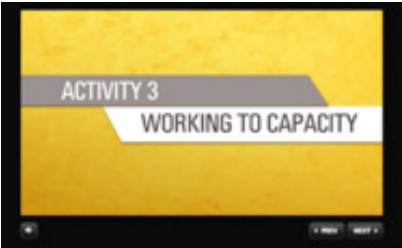
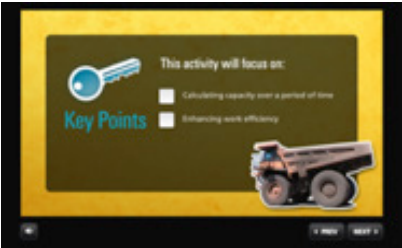
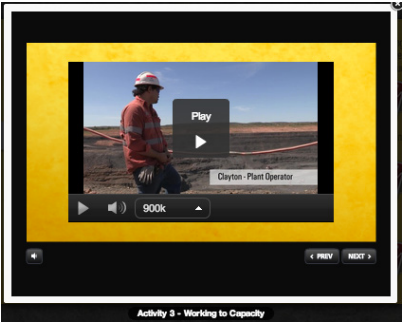
*Would you like to be in charge of the store and make sure it gets everything it needs?*



### Activity Complete

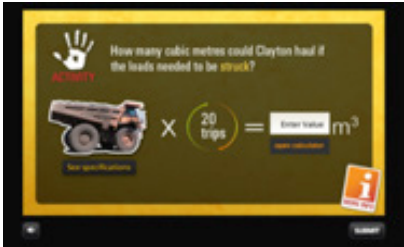

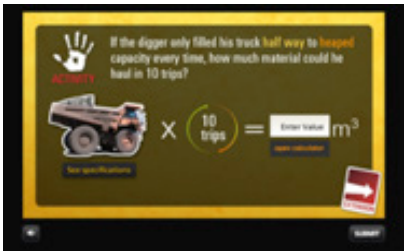



Well Done



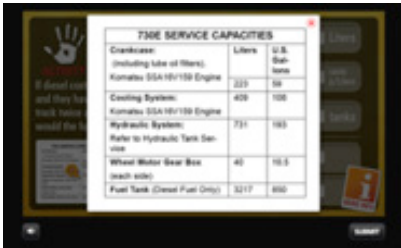
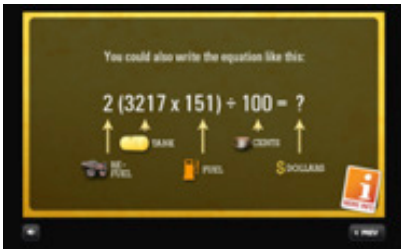
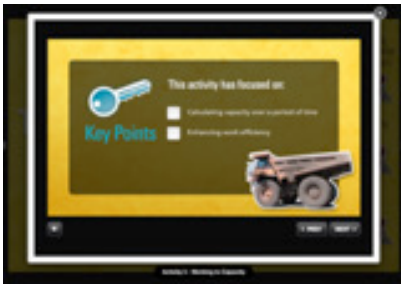
Slide Image	Activity A3 Working To Capacity
	<p>Activity 3 Working to Capacity</p> <p><i>In this story, you'll meet Clayton, who drives a haul truck at the Macarthur River Zinc Mine.</i></p>
	<p>Key Points</p> <p>This activity will focus on:</p> <ul style="list-style-type: none"> <li>• Calculating capacity over a period of time</li> <li>• Enhancing work efficiency</li> </ul> <p><i>You'll hear about the machines in the mine, and what they do. You'll also think about how Clayton works with the other operators to keep things efficient and use knowledge of the haul truck's capacity to their advantage.</i></p>
	<p>Clayton – Plant Operator 2:17 minutes</p> <p><i>This is the open pit, we've got a digger down on the bottom, south side, digging NAF. NAF is Non-Acid Formation. We've got eighty-fives working down there. We've got a drill pattern on the far south side, which is going to be blasting in another day or two. We've got the grader working up on the switchback on the south side ramp. Water cart, just getting rid of all the dust, just around the mine site to make it a bit more easier for the truckies – operators to operate on.</i></p> <p><i>We have the north ramp – north is that way – south ramp, east, which is the clay side, and west. The quickest way to remove water from the pits is by pipes, and they connect to the fans which blows it out and evaporates, and that's the main way that's used to extinguish water.</i></p> <p><i>Here we have a safety sign, safety glasses, check; hard hat, check; protective clothing, long-sleeve, check; and safety boots, steel cap, yep, check</i></p>

	<p>Efficiency</p> <p>Efficiency describes doing a job without wasting time, effort or money.</p> <p><i>The digger sounded it's horn when the truck's dump body was full so the driver could be ready to get out of the way of the next haul truck. The operators need to work together to use their time efficiently.</i></p>
	<p>Safety</p> <p>Did you see the other truck wait until the first truck had pulled away? The operators are very careful to follow safety rules when driving haul trucks in the mine.</p>
	<p>More Info</p> <p>NAF, or Non Acid Formation, is mined to produce zinc. Australia is the biggest zinc producer in the world. It is used to protect metals from corrosion, in paints, and even included in vitamins.</p>
	<p>Job Tip</p> <p><i>The water carts spray the ramps on the side of the mine pit to maintain the roads. It is more stable for the haul trucks than if the dirt was dry and loose. Safe driving makes the mine more efficient.</i></p>
	<p>Haul Cycles</p> <p><i>Once the haul truck is filled, it drives it's load to the dump site, empties its dump body, and returns to the load site to get filled again. There are two or more haul trucks doing this at the same time. This is a 'haul cycle' and keeps the team working efficiently.</i></p>

	<p>More Info</p> <p><i>Haul Cycle</i></p> <p><i>The time needed for a haul cycle depends on how long it takes to:</i></p> <ul style="list-style-type: none"> <li>- Empty the dump body of the truck</li> <li>- Travel to the dump site and return.</li> </ul>
	<p>Thinking + Discuss</p> <p>What kind of measurements do you think these trucks use to measure their dump body and capacity?</p> <p><i>Clayton also operates digger like the one in the clip. The operators need to know how much the haul trucks can hold so when they're operating the digger, they know when to stop filling</i></p>
	<p>Vehicle Specifications</p> <p>The 'specs' say that the dump body's capacity is 77 cubic metres, and heaped is 111 cubic metres.</p> <p><i>Here is a page from the manual for a similar truck to Clayton's. This is where operators would find information. Knowing how much the dump body can hold can be found in the 'specifications' section, or sometimes this is called the 'specs'.</i></p>
	<p>Activity</p> <p>How many cubic metres of heaped materials would clayton haul in 20 trips?</p>
	<p>More Info</p> <p>The haul trucks you saw are using 'heaped' loads. Other materials need to be hauled 'struck', or level with the sides of the dump body.</p>

	<p>Activity</p> <p>How many cubic metres could Clayton haul if the loads needed to be struck?</p>																														
	<p>More Info</p> <p>How many cubic metres could Clayton haul if the loads needed to be struck?</p>																														
	<p>Activity</p> <p>If the digger only filled his truck half way to heaped capacity every time, how much material could he haul in 10 trips?</p>																														
	<p>Extension</p> <p><i>If the digger filled his truck to 80% heaped capacity every time, how much material could he haul in 10 trips?</i></p>																														
 <table><tr><th colspan="3">T30E SERVICE CAPACITIES</th></tr><tr><th></th><th>Litres</th><th>U.S. Gallons</th></tr><tr><td>Crankcase (including lube oil filter)</td><td></td><td></td></tr><tr><td>Komatsu S5A16U150 Engine</td><td>225</td><td>59</td></tr><tr><td>Cooling System</td><td>438</td><td>114</td></tr><tr><td>Komatsu S5A16U150 Engine</td><td>731</td><td>193</td></tr><tr><td>Hydraulic Systems</td><td></td><td></td></tr><tr><td>Water to Hydraulic Tank Separator</td><td>45</td><td>11.9</td></tr><tr><td>Wheel Motor Gear Box (each side)</td><td>5217</td><td>860</td></tr><tr><td>Fuel Tank (Diesel Fuel Only)</td><td></td><td></td></tr></table>	T30E SERVICE CAPACITIES				Litres	U.S. Gallons	Crankcase (including lube oil filter)			Komatsu S5A16U150 Engine	225	59	Cooling System	438	114	Komatsu S5A16U150 Engine	731	193	Hydraulic Systems			Water to Hydraulic Tank Separator	45	11.9	Wheel Motor Gear Box (each side)	5217	860	Fuel Tank (Diesel Fuel Only)			<p>Activity</p> <p>Select the capacity in litres of the fuel tank?</p>
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	<p>More Info</p> <p>Litres or Liters?</p> <p>In Australia we use 'litres'. Other countries such as the US use 'liters'</p>																														



	<p>Activity</p> <p>If diesel costs 151 cents a litre and they have to re-fuel Clayton's truck twice a day, how much would the fuel cost?</p>
	
	<p>More Info</p> <p><i>You could also write the equation like this:</i></p> $2 (3217 \times 151) \div 100 = ?$
	<p>Thinking + Discuss</p> <p><i>Efficiency</i></p> <p><i>If Clayton fills his dump truck to its full capacity safely, how will it affect the other operators? Why do you think the operators know how to operate all kinds of machinery? How could this affect the productivity of the team? Why do you think there is more than one truck doing haul cycles in a mine?</i></p>
	<p>Key Points</p> <p>This activity has focussed on:</p> <ul style="list-style-type: none"><li>• Calculating capacity over a period of time</li><li>• Enhancing work efficiency</li></ul> <p><i>You've learned a bit about what plant operators, like Clayton, have to think about every day on the job. You've worked out how to work at the safest and highest capacity in order to be the most efficient.</i></p>

	<p>Thinking + Discuss</p> <p><i>Would you like to drive these trucks?</i></p> <p><i>Would you be ready to make the best use of your time?</i></p> <p><i>How would you feel about being part of a team that has a shared job to do?</i></p> <p><i>Would you like to help make big projects happen?</i></p>
	<p>Activity Complete</p> <p>Well Done</p>